## Q: What are the requirements on signal levels?

### Answer:

The Signal Level LED, on the device, should at least be flashing. This indicates that there is an acceptable signal level.

The LED signal levels are:

- 1. Off: No signal or a very weak signal
- 2. Flashing: acceptable signal level
- 3. On: Strong signal level

Please note that the signal level LED is only important once the device is registered

## Q:What should I do if I have signal strength problems ?

#### Answer:

A) Make sure the GSM device's antenna is not inside a box.

B) Extended the antenna as high as possible above the location of the GSM device.

C) Change network by changing the SIM in the device. Other networks may have better coverage in the area.

D) If the device is a 3G device and using a 3G only SIM i.e. 3 network, then change to Vodafone or eir SIM (Use EE in the UK) as this will allow the device to select the strongest signal level between 2G and 3G.

E) If all else fails you will need to get a high gain antenna. Email sales@2t-tec.com

### Q: Can I detect if I have signal level problems without visiting the site?

#### Answer:

Yes, you can send the command "Diag live" for the current values, or if the device has been in operation for more than 5 days "Diag stored" which will give you the stored values recorded over the last 5 days.

You will receive a text like bellow:

VME+15 NV SS too low: 0 Not checking SS: 0 Cant register: 0 OS Problem: 0 State stuck: 0 Health Metric: Good

Returned Text	Meaning
VIME+ 25 NV:	Software version ie VME+ 2.5 and NV means non volatile or stored.
SS too low:	Number of times Signal strength was below an acceptable threshold.
Not checking SS	Network issue: Network is not giving a response to the request for Signal Level. Device may reset.
Cant register:	Network issue: the Network is not allowing the SIM or the device to register on its Network. The Device will not function correctly.
OS Problem	Internal device problem. Device may reset.
State stuck	Internal device problem. Device may reset. This can be caused by the network not allowing the device to register. Changing the Network of the SIM or simply replacing the SIM can solve this problem.
Health Metric*	A combination of the numbers above providing a word in English as a measure of the health of the device, Can be 'Good', 'Bad' and 'Very Bad'

\* This metric may or may not be present depending on the device installed.

Q: The signal level was good when I installed the device. Why is it showing poor signal level now?

# Answer:

Just like a mobile phone the signal level for the device is dependent upon the network, were the device is positioned etc, so, for example, during peak traffic times the signal level may degrade as there are more users using the mast in that area, or a mast might be taken down for maintenance.